
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

STATUS: Effective**POLICY NUMBER:** WATER-019-NPD**SUBJECT:** State Total Phosphorus Treatment Standard for 1 MGD or Greater Sanitary Wastewater Dischargers**AUTHORIZED:** Thomas W. Easterly, Commissioner**SUPERSEDES:** New**ISSUING OFFICE(S):** Office of Water Quality, Permits Branch**ORIGINALLY EFFECTIVE:** December 12, 2014**RENEWED/REVISED:**

Disclaimer: This Nonrule Policy Document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under [IC 13-14-1-11.5](#). It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and, if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to [IC 13-14-1-11.5](#), this policy will be available for public inspection for at least 45 days prior to presentation to the Environmental Rules Board and may be put into effect by IDEM 30 days afterward. IDEM also will submit the policy to the Indiana Register for publication.

1.0 PURPOSE

The purpose of this policy is to establish the Commissioner's determination that an effluent containing no more than 1.0 milligram per liter (mg/l) of total phosphorus as a monthly average is needed for sanitary wastewater treatment plants with average design flows greater than or equal to 1 million gallons per day (mgd).

Excessive phosphorus in the discharge from wastewater treatment plants can result in harmful algal blooms that negatively impact fish habitat, cause fish kills, lower dissolved oxygen, and pose public health concerns related to increased exposure to toxic microbes. The effects of nutrient pollution can be observed both in local waters as well as downstream waters. The agency has calculated that sanitary wastewater treatment plants with average design flows greater than or equal to 1 mgd constitute approximately 90% of the total load of phosphorus discharged to Indiana's waterways from sanitary wastewater treatment plants.

The agency intends, with this policy, to set a practical state treatment standard of 1 mg/l total phosphorus for 1 mgd or greater sanitary wastewater dischargers to significantly reduce the discharge of nutrients to surface waters of the state to protect downstream water uses. Pursuant to [327 IAC 5-10-2\(a\)\(2\)](#) the Commissioner may determine, irrespective of the quantitative total phosphorus content of the discharge, that phosphorus reduction is needed to protect downstream water uses.

2.0 SCOPE

This policy applies to publicly owned treatment works (POTWs) and semipublic facilities with average design flows greater than or equal to 1 mgd. The Commissioner may make determinations under [327 IAC 5-2-10\(a\)\(2\)](#) for other types of point source phosphorus discharges on a case-by-case basis.

The agency will consider the NPD applicable to all major sanitary dischargers that are scheduled to submit a permit renewal application after 01/01/2015, or who apply for a new NPDES permit after 01/01/2015. NPDES permit applications due and received prior to 01/01/2015 will receive a "report only" requirement for total phosphorus upon renewal/issuance, but would receive a 1 mg/l total phosphorus limit during the next permit renewal cycle after 01/01/2015.

3.0 SUMMARY

Sanitary wastewater treatment plants with average design flows greater than or equal to 1 mgd constitute approximately 90% of the total load of phosphorus discharged to Indiana's waterways from sanitary wastewater treatment plants. Implementing phosphorus removal to achieve a total phosphorus limit of 1.0 mg/l as a monthly average, in accordance with [327 IAC 5-10-2\(a\)\(2\)](#), will result in a significant reduction of phosphorus in Indiana's waterways. Therefore, phosphorus monitoring and treatment requirements pursuant to [327 IAC 5-10-2](#) are being included in the permit renewals for sanitary wastewater treatment plants with average design flows of greater than or equal to 1 mgd.

4.0 DEFINITIONS

4.1. "Agency" - The Indiana Department of Environmental Management (IDEM).

4.2. "Nonrule policy" - The term assigned by IDEM to those policies identified in [IC 13-14-1-11.5](#) as any policy that: A. Interprets, supplements, or implements a statute or rule; B. Has not been adopted in compliance with [IC 4-22-2](#); C. Is not intended by IDEM to have the effect of law; and D. Does not apply solely to the internal IDEM organization (is not an Administrative Policy.)

5.0 ROLES

The Permits Branch of the Office of Water Quality in IDEM administers the NPDES permits program for individual point source discharges of pollutants into waters of the state of Indiana. The Permits Branch is responsible for determining which NPDES permits must remove phosphorus in accordance with [327 IAC 5-10-2](#).

6.0 POLICY

Under the authority of [327 IAC 5-10-2\(a\)\(2\)](#), the Commissioner has determined that a monthly average total phosphorus limit of 1.0 mg/l is needed for sanitary wastewater treatment plants with average design flows greater than or equal to 1 mgd, to protect downstream water uses.

7.0 REFERENCES

Indiana Administrative Codes:

- A. [327 IAC 2-1-6](#), Minimum surface water quality standards
- B. [327 IAC 2-1.5-8](#), Minimum surface water quality criteria
- C. [327 IAC 5-10-2](#), Phosphorus removal

8.0 SIGNATURES


Thomas W. Easterly, Commissioner
Indiana Department of Environmental Management

SEPTEMBER 12, 2014
Date


Bruno Pigott, Assistant Commissioner
Office of Water Quality

9/10/14
Date


Carol Comer, Assistant Commissioner
Office of Legal Counsel and Criminal Investigations

9/10/14
Date

This policy is consistent with agency requirements.


Quality Improvement Section
Office of Planning and Assessment
Office of Compliance Support

September 12, 2014
Date

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